

WHAT IS CLAIMED IS:

1. A recording apparatus for recording to a recording medium AV data containing at least one of audio data and video data, and recovery data for restoring management information for the AV data when AV data recording did not end normally, comprising:
 - means for generating recovery data for each constant or variable period;
 - means for generating AV data; and
 - recording means for recording the recovery data while interleaving the recovery data with the AV data during AV data recording.
2. A recording apparatus as described in claim 1, wherein the recovery data contains recording address information for the recorded AV data.
3. A recording apparatus as described in claim 1, wherein the recovery data contains file management information for the recorded AV data.
4. A recording apparatus as described in claim 1, wherein the recovery data contains playback time information for the recorded AV data.
- 25 5. A recording apparatus as described in claim 1, wherein the AV data is MPEG-encoded data, and the

recovery data contains a start address for an I-picture in the recorded AV data.

6. A recording apparatus as described in claim 1,
5 wherein the recovery data contains a serial number or time information.

7. A recording apparatus as described in claim 1,
10 wherein the recovery data contains address information for previously recorded recovery data.

8. A recording apparatus as described in claim 1,
wherein the recovery data contains difference information from previously recorded recovery data.

15 9. A recording apparatus as described in claim 1,
wherein the recovery data contains information acquired for previously recorded recovery data.

20 10. A recording apparatus as described in claim 1,
wherein the recovery data contains address information for recovery data recorded next.

25 11. A recording apparatus as described in claim 1,
wherein the recovery data contains identification information for identifying recovery data.

12. A recording apparatus as described in claim 1,
wherein the recovery data is interleaved with AV data units
of a specific size.

5 13. A recording apparatus as described in claim 1,
wherein the recovery data is interleaved with AV data units
of a specific recording time.

10 14. A recording apparatus as described in claim 1,
wherein the recovery data is interleaved every specific
recording unit of AV data.

15 15. A recording apparatus as described in claim 1,
further comprising means for storing in a predefined
location recovery data address information denoting an
address of the recovery data.

20 16. A recording apparatus as described in claim 15,
wherein the predefined location is a location provided on
the recording medium.

25 17. A recording apparatus as described in claim 16,
wherein the location provided on the recording medium is a
specified location on the recording medium comprising one
or multiple banks.

18. A recording apparatus as described in claim 16,

wherein the location provided on the recording medium is one or multiple specific files on the recording medium.

19. A recording apparatus as described in claim 15,
5 wherein a recording member separate from the recording medium is provided, and the predefined location is a location provided in the recording member.

20. A recording apparatus as described in claim 19,
10 wherein the recording member is removably disposed.

21. A recording apparatus as described in claim 15,
wherein the recovery data address information is a serial number or time information for the recovery data.

15
22. A recording method for recording to a recording medium AV data containing at least one of audio data and video data, and recovery data for restoring management information for the AV data when AV data recording did not 20 end normally, comprising steps of:

generating recovery data for each constant or variable period;

generating AV data; and

recording the recovery data while interleaving the 25 recovery data with the AV data during AV data recording.

23. A recording method as described in claim 22,

wherein the recovery data contains recording address information for the recorded AV data.

24. A recording method as described in claim 22,
5 wherein the recovery data contains file management information for the recorded AV data.

25. A recording method as described in claim 22,
10 wherein the recovery data contains playback time information for the recorded AV data.

26. A recording method as described in claim 22,
wherein the AV data is MPEG-encoded data, and the recovery data contains a start address for an I-picture in
15 the recorded AV data.

27. A recording method as described in claim 22,
wherein the recovery data contains a serial number or time information.

20
28. A recording method as described in claim 22,
wherein the recovery data contains address information for previously recorded recovery data.

25
29. A recording method as described in claim 22,
wherein the recovery data differenc information from previously recorded recovery data.

30. A recording method as described in claim 22, wherein the recovery data contains information acquired for previously recorded recovery data.

5

31. A recording method as described in claim 22, wherein the recovery data contains address information for recovery data recorded next.

10 32. A recording method as described in claim 22, wherein the recovery data contains identification information for identifying recovery data.

15 33. A recording method as described in claim 22, wherein the recovery data is interleaved with AV data units of a specific size.

20 34. A recording method as described in claim 22, wherein the recovery data is interleaved with AV data units of a specific recording time.

35. A recording method as described in claim 22, wherein the recovery data is interleaved every specific recording unit of AV data.

25

36. A recording method as described in claim 22, comprising a step of storing in a predetermined location

recovery data address information denoting an address of the recovery data.

37. A recording method as described in claim 36,
5 wherein the predefined location is a location provided on the recording medium.

38. A recording method as described in claim 37,
10 wherein the location provided on the recording medium is a specified location on the recording medium comprising one or multiple banks.

39. A recording method as described in claim 37,
15 wherein the location provided on the recording medium is one or multiple specific files on the recording medium.

40. A recording method as described in claim 36,
wherein the predefined location is a location provided in a recording member separate from the recording medium.

20
41. A recording method as described in claim 40,
wherein the recording member is removably disposed.

25
42. A recording method as described in claim 36,
wherein the recovery data address information is a serial number or time information for the recovery data.